



# WIPO-WTO COLLOQUIUM PAPERS: 2017 ASIAN EDITION

RESEARCH PAPERS FROM THE 2017 REGIONAL WIPO-WTO  
COLLOQUIUM FOR IP TEACHERS AND SCHOLARS IN ASIA



WTO OMC







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**FOR IP TEACHERS AND SCHOLARS IN ASIA**

*Compiled by the WIPO Academy and*

*the WTO Intellectual Property, Government Procurement and Competition Division*

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## PREFACE

The production of the Asian edition of the *WIPO WTO Colloquium Papers* represents a significant milestone - it marks an important new direction for what has been an invaluable programme of collaboration between our two organizations. More importantly, it demonstrates the remarkable progress achieved in intellectual property (IP) scholarship across the Asian region in recent years, and the vital roles of IP teachers and scholars in building a knowledge base that is essential for effective policymaking in this challenging and fast-changing field.

In 2004, WIPO and the WTO launched a series of annual colloquia for teachers and researchers working on IP law and policy. The WIPO-WTO Colloquia form part of a strategy to build sustainable national capacity in developing countries and least developed countries for teaching and research in the field of IP. These countries have sought to apply the IP system ever more effectively as a tool for economic and social development, therefore they have had to build national expertise and bolster their own capacity to analyse complex legal and policy issues confronting the domain of IP today. The colloquia were conceived as a way of building self-sustaining policy knowhow, while simultaneously promoting cooperation and collaboration. Hence, our two organizations are responding to the growing demand to strengthen the distinct legal and policy expertise available in individual countries, while scholars and teachers have concurrently recognized the value of dialogue, the pooling of ideas and the sharing of experiences from different countries around the world.

This interest was developed in a period of unprecedented globalization of the IP system – a time marked by policymakers seeking to build their understanding of the practical possibilities for creating a balanced and effective IP system that can contribute to economic and social development. For many countries, these trends have sparked an intensive, wide-ranging process of inquiry about how to adapt and apply IP principles to ensure economic growth, sound public policy, and sustainable development, while recognizing the diversity of economic, social and technological settings, national developmental priorities, alongside legal and commercial systems. Through tackling the policy challenges faced by the IP system in different ways, countries are learning by doing, thereby producing an ever more diverse range of practical experiences that offer insights to others grappling with similar challenges elsewhere. Asian countries in particular have shown dynamism and diversity in the ways they have taken up the IP system as a means for economic and social development, with valuable lessons to be learned from this experience.

To promote such mutual learning and exchange of ideas, the WIPO-WTO Colloquium has, over the years, brought together an impressive array of scholars from across the globe, and has forged an alumni network that serves to maintain this dialogue and collaboration beyond the formal bounds of the colloquium programme itself. The colloquia have evolved as a clearing house of new ideas, new critical approaches and cutting-edge scholarship, with a unique focus on the developing world. In order to harvest the fruit of this scholarship, and to ensure the sustained impact and greater dissemination of this knowledge, the initiative to publish colloquium participants' papers in an edited, peer-reviewed academic journal, titled the *WIPO WTO Colloquium Papers* was taken in 2010. The *Papers* are published, under the guidance of an editorial board comprising senior international scholars and officials. The six editions of the *Papers* have confirmed the publication's status as an academic journal with a unique focus on emerging policy and legal issues within a wide range of jurisdictions across developing countries.

The success of the WIPO-WTO Colloquium- and the impossibility of meeting the overwhelming demand (applications numbering some eight times more than available places) – led to the proposal of regionally focussed versions of the colloquium. This enables a closer look at specific regional trends and strengthens the academic networks within a region. The first such regional exercise took shape as the WIPO-WTO Colloquium for IP Teachers and Scholars in Asia, which convened in February 2017 with the cooperation of the Singapore Management University. The WIPO-WTO Colloquium for Asia provided IP academics in the region with a greater understanding of current international developments in IP law and policy, particularly relevant to the Asian context. It also promoted cutting edge Asia-focused research; and served as a forum to strengthen collaborative networks and academic exchanges across the Asian region.

This volume is the outcome of the regional gathering. Its contents give a good measure of the intellectual depth, range and vitality of participants in the WIPO-WTO Colloquium for Asia who gave papers on diverse topics, ranging from a close analysis of legal issues to the interaction of IP with public policy questions, in addition to cross-border and trade-related issues of direct relevance to Asian countries today. Participants also explored new approaches to

teaching and training in IP law and its practice, in view of the far wider and more diverse constituency of IP education. The trend, while welcome in itself, is challenging for educators in the region.

All of us who have participated in the colloquium programme have benefited from the hard work and dedication of many colleagues within WIPO and the WTO Secretariat – notably, the WIPO Academy and the WTO's Intellectual Property, Government Procurement & Competition Division, with the invaluable support of the Institute of Training and Technical Cooperation (ITTC). All have contributed valuably to the design and delivery of this programme, and their spirit of collegiality makes this not only a demanding programme, but also a pleasurable one.

We owe a particular debt of gratitude to the Editorial Board and the editors of this Asian edition of the *WIPO-WTO Colloquium Papers*, as they have been indispensable in ensuring that the *Papers* can be used as a trusted, academically sound and readable source of cutting edge IP scholarship from an impressive group of emerging scholars representing a variety of developing countries. They have also served to fulfil the intended contribution of the *Colloquium Papers* initiative towards the capacity building goals of the WIPO Academy and WTO's ITTC, by guiding emerging scholars, where needed, in sculpting their academic writing skills through a participative and interactive dialogue, thus enhancing the potential to add even more diverse perspectives to policy debates in a sustained and credible way. Finally, we record our deep appreciation for the contributions made by individual scholars to this edition of the *Papers*, and its preceding volumes, which we have come to know and respect for their contributions to policy and legal scholarship. We are sure that this active, informed and thoughtful participation in many of the key public policy debates of today will continue, thus exemplifying the important public service role performed by the scholarly community today.



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## PROMOTING GEOGRAPHICAL INDICATIONS FOR AGRICULTURAL PRODUCTS IN Indonesia\*\*

Dr Mas Rahmah\*

**Abstract:** The agricultural sector is crucial to the Indonesian economy as agriculture is one of its key sectors; employing and providing income for the majority of Indonesians today. National agricultural products also satisfy the largest demand for these products domestically and Indonesians primarily consume home-grown products. It is thus not surprising that Indonesia is home to many local agricultural products with unique qualities and special characteristics, and that these products are associated with geographical factors such as Cianjur Rice, Cilembu Cassava, Toraja Coffee, Alor Vanili, Banda Nutmeg, Java Tea, Deli Tobacco, etc. In this context, this paper will analyze how geographical indications (GIs) can assist in supporting agricultural development by protecting the unique product attributes and the quality of agricultural products. This paper also highlights that using GIs to identify and market agricultural products may support the development of agricultural products by exposing the benefit that GIs can bring to the agricultural sector, such as increasing productivity, diversity and product availability, improving exports, and increasing the competitiveness of local products both in the national and international market. Moreover, promoting GI protection and using GIs for agricultural products in Indonesia may promote agricultural development and may indirectly contribute to promoting national food security through adding value by incorporating territory-specific cultural, environmental and social qualities into production, processing, and developing of unique local, niche, and special agricultural products.

**Keywords:** geographical indication, food security, agricultural products, Indonesian IP law.

### 1. INTRODUCTION

Agriculture in Indonesia is a key sector that contributes to the Indonesian economy and trade surplus, and is the main source of fulfilling domestic consumption. Domestic consumer demand for agricultural products has been increasing over the years and its growth has largely been attributed to per capita income growth. With its vast and abundant fertile soil, Indonesia continues to be a major global key producer of a wide variety of agricultural tropical products. Important agricultural commodities include palm oil, natural rubber, cocoa, coffee, tea, cassava, rice, and tropical spices. Indonesia is among the world's largest producers of palm oil, coffee, rubber, cocoa, and spices (nutmeg, cinnamon, and cloves).<sup>1</sup>

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Despite the advantages that Indonesia enjoys with regard to the agriculture sector such as its abundant natural resources and high agricultural production, Indonesia is still facing the problem of food security due to adverse weather conditions, political instability, economic factors (unemployment, rising food prices), a growing population, and its system of agriculture.

Historically, the agricultural sector in Indonesia has performed well by focusing on the production of staple food crops such as rice, corn, sugar, and soybeans. This has contributed significantly to Indonesia's growth, generating a significant increase in employment rates and markedly reducing poverty rates.<sup>2</sup> Despite this, the productivity gains of most food crops has been significantly slowing down, with the majority of farmers today operating with less than one-half hectare of land. Because of this, there is now less potential for agricultural production to generate additional employment and income for the country.<sup>3</sup>

Currently, the agricultural sector in Indonesia is characterised by low and declining productivity rates, poor market access and access to information, environmental degradation, vulnerability to unpredictable climate and weather, including rainfall, pest infestation, floods and other natural disasters, which inevitably cause crop failures. This situation has posed a huge threat to the availability of agricultural food products, thus influencing the food security situation in the country.

To address the problem of availability of food, it is necessary to focus on the import policy concerning food staples in order to increase the domestic food staple supply. Import policies are often introduced due to the failure of the government to fulfill rising food demand in the face of low rates of productivity of food crops and the declining competitiveness of local products. This appears to be the situation for Indonesia today. Currently, Indonesia imports a variety of food staples from countries such as Thailand, Vietnam, India, China, and the Philippines.<sup>4</sup> As Indonesia continues to increase its imports of food staples every year, it is probably one of the most import-dependent agrarian countries in the world.<sup>5</sup>

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\*\*This paper is based, in large part, on a paper published in the Journal of Intellectual Property Rights in March 2017. See, Rahmah, Mas, "The Protection of Agricultural Products under Geographical Indication: An Alternative Tool for Agricultural Development in Indonesia", JIPR Vol.22(2) [March 2017] 90-103.

<sup>1</sup> Richard Barichello, Arianto Patunru, "Agriculture in Indonesia: Lagging Performance and Difficult Choices", *Choices*, Vol 24 (2), 2nd Quarter, 2009, pp.37.

<sup>2</sup>World Bank, "Priority Issues for Indonesian Agriculture", <http://www.worldbank.or.id> - January 2005.

<sup>3</sup> Id.

<sup>4</sup> "Agricultural Sector of Indonesia", Indonesia Investments, <https://www.indonesia-investments.com/culture/economy/general-economic-outline/agriculture/item378?>

<sup>5</sup>"Food Security for Indonesia Should Be Top Priority, Experts Warn", *Jakarta Globe*, 23 November 2013

A factor contributing to the low productivity rates of agricultural products in Indonesia are the falling prices of such products.<sup>6</sup> As the selling prices of such products are far lower than the costs, farmers are often less incentivised to produce and often cease farming activities altogether.<sup>7</sup> Another factor contributing to the low productivity rates is the unstable production levels of agricultural products. This is because production levels are highly influenced by soil fertility, climate change, weather, including rainfall, disasters, and outbreak of pests and diseases.

Furthermore, declining competitiveness of local food crops is a factor impacting food availability and food security in Indonesia. Since Indonesian agricultural products are less competitive than imported products and farming systems – which are scale-based and linked to the production of commodities – have weakened, an alternative for the development of agricultural products across certain regions is to consider local specificities as factors that determine the identity of such products. Today, developing identities for traditional or local products is regarded as a key strategy for diversifying economic activity, conquering foreign markets and combating competition from imported products.<sup>8</sup> This can be achieved through promoting GIs.

A GI is the best mechanism to achieve this as it allows producers to a gain competitive advantage through market recognition, capturing the premiums for their products in the marketplace by creating exotic or scarcity images, differentiating their products from those produced elsewhere, and gaining legal protection. As a GI has also been recognized as a qualification strategy that emphasizes the territory where the agricultural products are produced, a GI is likely to ensure the development of agri-business in the long-run.

GI protection for agricultural products is crucial given that agriculture remains a key sector for growth of the Indonesian economy and as a source of income for the majority of Indonesian households today. Agriculture also plays an important role in national economic development, especially in reducing poverty rates, providing employment to citizens, improving farmers' welfare and maintaining sustainable use of natural resources and environment, as well as, fulfilling domestic consumption.

In Part I, this paper will examine the definition of food security. In Part II, this paper will introduce the concept of GI and detail the GI protection in Indonesia. In Part III, this paper will highlight the GI protection initiatives for

agricultural products. In Part IV, the benefits of using GI to achieve food security will be analysed.

## 2. AGRICULTURAL PRODUCTS AND FOOD SECURITY IN INDONESIA

### 2.1 Food Security Defined

In its narrowest sense, food security refers to the availability of sufficient food, whether at the global, national, community, or household level.<sup>9</sup>

However, food security is not only about producing more food. It is also about providing physical and economic access to balanced diets and safe drinking water to all people at all times. This idea is reflected in the definition of food security provided by the 1996 World Food Summit and Article 1 of 1996 Rome Declaration on World Food Security, which highlights that food security exists when all people, at all times, have physical and economic access to sufficient safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life.<sup>10</sup>

The term “food security” is also coined with the concept of a right to food as ‘the right of every man, woman and child, alone or in community with others, to have physical and economic access at all times to adequate food or means for its procurement in ways consistent with human dignity’.<sup>11</sup> In order to ensure the right to food, there is a need for states to be proactively engaged in strengthening people’s access to food, their utilization of resources, and their means to maintain their livelihood, as these factors would impact their food security in the long term.

Food security has also been defined under the Indonesian Food Law of 2012 (Law No. 18/2012), as a situation where an “individual” at all times, has physical, social and economic access to sufficient, diversified, safe and nutritious food that meets his or her dietary needs necessary for an active and healthy life.<sup>12</sup>

### 2.2 Agricultural Development and Food Security as Indonesian National Goal

Improved access to food — through increased agricultural productivity and incomes — is essential to meet the food needs of the world's growing population.<sup>13</sup> However, it

<http://jakartaglobe.beritasatu.com/news/food-security-for-indonesia-should-be-top-priority-experts-warn/>

<sup>6</sup>Inside Indonesia, “Food security in Indonesia”,

<http://www.insideindonesia.org/food-security-in-indonesia-2>

<sup>7</sup> Id

<sup>8</sup>Luan Carlos Santos Silva et al, “Geographical Indications Contributions for Brazilian Agribusiness Development”, *African Journal of Agricultural Research*, Vol. 8(18), 2013, pp 2081.

<sup>9</sup>Per Pinstруп-Andersen, “Food Security: Definition and Measurement”, *Food Sec.*, 2009, pp.5-7.

<sup>10</sup> Mohamed Behnassi, Sanni Yaya, “Food Crisis Mitigation: The Need for an Enhanced Global Food Governance”, in Mohamed Behnassi, et.al (ed), *Global Food Insecurity Rethinking Agricultural and Rural Development Paradigm and Policy*, London: Springer Science+Business Media B.V., 2011, pp. 96-97.

<sup>11</sup> J.M. Lenné and D. Wood, *Agrobiodiversity Management for Food Security : a Critical Review*, London : CAB International, 2011, p. 12.

<sup>12</sup> Article 1.4 of Indonesian Food Law of 2012.

<sup>13</sup> William McLeod Rivera, M. Kalim Qamar, *Agricultural Extension, Rural Development and The Food Security Challenge*, Rome: FAO, 2003, pp.31.

should be noted that a number of factors related to the production of seeds and control over plant materials can impact the attainment of food security.<sup>14</sup>

In many parts of the world, gains in agricultural productivity have lifted millions out of poverty and provided a platform for both rural and urban economic growth. In Indonesia, the agricultural sector plays a crucial role given its significant contribution to economic growth, foreign exchange earnings, and in achieving food security. Despite this, Indonesia is facing difficulties in sustaining its food production capacity due to a limiting factor: the availability of natural resources, which also influences the food security situation in the country. First, the fertile agricultural land necessary for food production is decreasing due to the rampant conversion of agricultural lands into land for non-agricultural use. Second, the availability of water resources is fast decreasing mainly due to the decline of irrigation services and increased competition in the use of water for non-agricultural needs. Third, the emerging negative impacts of global climate change certainly has generated increased risks and uncertainties in the availability of natural resources. According to the Indonesian Food Law of 2012, failure to meet targets of food production are caused by factors such as climate change, outbreak of fish and animal diseases, natural disasters and natural hazards, social disasters, environmental pollution, degradation of land and water resources, competition in the use of food production resources, shift in land use, and economic disincentives.<sup>15</sup>

The Indonesian Food Law of 2012 states that food is the most essential human need and fulfilling it is part of according human rights as guaranteed in Indonesian Constitution (the 1945 Constitution of the Republic of Indonesia). This means that the Indonesian Constitution guarantees the right to food for Indonesian citizens. With a rapidly increasing population, estimated to be about 293 million people in 2050<sup>16</sup> - the critical question is how Indonesia will feed the population and ensure the right to food in the next 33 years?

The Indonesian Food Law of 2012 strongly regulates food security, providing that it should be developed primarily through domestic production and Indonesia's ability to define its own food preferences (food sovereignty) based on local specific needs and resources. The law also emphasizes that Indonesian food security has to be based on local food availability and food sovereignty.

There is a need for the government to be proactively engaged in strengthening people's access to food; their

utilization of food; and their means to earn a livelihood. The Indonesian government should also develop food security systems and strategies that fit into five interrelated subsystems that include production, process, distribution, access, and consumption of food.<sup>17</sup> These efforts can go a long way to ensuring food security in the long term.

Greater focus is usually placed on the security and development of plant genetic resources for food and agriculture in food security programmes because these serve as the raw materials used by plant breeders and farmers to create new crop varieties. As such, they are viewed by many as forming the foundation for modern agriculture and for being essential to achieve food security.<sup>18</sup>

To this end, the Indonesian government started the Green Revolution in the 1980s<sup>19</sup> to attain self-sufficiency in certain agricultural products, particularly rice, which is the main staple food for the majority of the population.<sup>20</sup> The Green Revolution was used to produce rapid increases in staple food yields through improved, high-yielding varieties combined with the expanded use of fertilizers and other chemical inputs,<sup>21</sup> which led to a dramatic impact on incomes and food supplies in Indonesia. The Green Revolution has also facilitated institutional and social changes in rural areas and provided opportunities for sustaining economic growth and reducing poverty rates.<sup>22</sup> By implementing the Green Revolution, self-sufficiency was temporarily achieved in the mid-1980s. The Indonesian National Logistic Agency (BULOG) has also succeeded in stabilizing domestic rice prices as part of its conscious effort to keep domestic rice prices aligned with the long-run trend of world prices<sup>23</sup> to make rice farming more profitable from 1975-1996.

<sup>17</sup> Subejo, Dwiningtyas Padmaningrum, "Tackling Food Security Problem in Indonesia", *Jakarta Pos*, November 26, 2013.

<sup>18</sup> Melissa D. Ho, "International Treaty on Plant Genetic Resources For Food and Agriculture", in Marlina A. Diaz (Ed), *Plant Genetic Resources and Food Security*, Nova Science Publishers, Inc : New York, 2010, pp.2.

<sup>19</sup> The "green revolution," a term coined by William Gaud in October, 1968, is a process that leads to improved agricultural productivity. It is coined by the term "ever-green revolution" to highlight the pathway of increasing production and productivity in a manner such that short- and long term goals of food production are not mutually antagonistic. The Ever-green Revolution used by to reflect a balance between human numbers and human capacity to produce food of adequate quantity, quality and variety. See at M.S. Swaminatha, "Ever-Green Revolution and Sustainable Food Security", in Allan Eaglesham, et.al (ed), *Agricultural Biotechnology: Finding Common International Goals*, National Agricultural Biotechnology Council: Minnesota, 2004, pp.64.

<sup>20</sup> Indonesia has the highest per capita rice consumption in the world (approximately 139 kilo per capita per year).

<sup>21</sup> Per Pinstrup-Andersen, Peter B.. R.. Hazel, "The Impact of the Green Revolution and Prospects for the Future," *Food Reviews International*, Vol 1, No.1, 1985, pp.1.

<sup>22</sup> Id.

<sup>23</sup> C. Peter Timmer, "Food Security in Indonesia: Current Challenges and the Long-Run Outlook", *Working Paper Number 48*, Center for Global Development, November 2004, pp.6.

<sup>14</sup> Carlos M. Correa, Quaker, "TRIPS-Related Patent Flexibilities and Food Security : Options for Developing Countries, Policy Guide," Geneva : QUNO-ICTSD, 2012, pp.2.

<sup>15</sup> Article 22.1 of Indonesian Food Law of 2012.

<sup>16</sup> J.A. Lassa, "Emerging 'Agricultural Involution' in Indonesia: Impact of Natural Hazards and Climate Extremes on Agricultural Crops and Food System", in Y. Sawada, S. Oum (eds.), *Economic and Welfare Impacts of Disasters in East Asia and Policy Responses*, Jakarta: ERIA, 2012, pp. 602.

Since rice is a primary staple food commodity, stable prices of rice allowed consumers to have access to the additional rice produced and gave farmers greater confidence to make the necessary investments to raise productivity, thus promoting greater agricultural growth.

Hence, it cannot be denied that growth in the agricultural sector in Indonesia went in tandem with the Green Revolution. Seed-fertilizer technologies and substantial government subsidies allowed increased production through crop intensification, thus ensuring agricultural growth and productivity for Indonesia.

With Indonesia's agricultural development, this affected its agricultural trade patterns, food security status, and outlook on these trends.<sup>24</sup> Food security in Indonesia has generally been driven by a pro-economic growth attitude and a successful Green Revolution, led by high-yielding rice varieties, massive investments in rural infrastructure, including irrigation, and availability of fertilizers. In Indonesia, growth in agricultural production led to increased food availability and higher income levels, which resulted in improved food accessibility for most citizens. Food utilization in Indonesia was also positively affected by increased education, better nutrition, and improved food safety and sanitation.

Historically, the agricultural policy in Indonesia focused largely on achieving self-sufficiency in food and price stability. However, such policies have since been narrowed to focus mainly on rice, sugar, and palm oil, and the policy instruments deployed were principally trade interventions and input subsidies.<sup>25</sup> The government has used a wide variety of policy instruments in pursuing these goals and has spent substantial sums of public monies to give subsidies and finance investments in agricultural research, innovation and dissemination.

Ironically, after achieving self-sufficiency, Indonesia currently depends on imports to secure its domestic rice supply. According to agronomist Jhamtani Hira, the weaknesses of food security programs in Indonesia are its over-emphasis on rice production and the dominant role assumed by the government, which leaves little opportunity for people to develop food security initiatives based on local resources.<sup>26</sup> The Indonesian experience with the Green Revolution indicates that it was focused on increasing rice production rather than farmers' income and that the program was not cost-efficient as it required huge funding.

After evaluating the previous policy on food security, several programmes are currently being implemented to

reach the target of self-sufficiency in staple foods in 2017. Since 2007, the government has started revitalization programs for small farmers to raise food production levels. In January 2016, the President of Indonesia formulated a food policy with the main purpose of fulfilling the peoples' need for food, decreasing poverty rates, making farmers more prosperous, and increasing the contributions given to domestic food producers to better fulfil the needs for producing food.<sup>27</sup> In addition, improving trade chains, data systems, agricultural productivity levels, agricultural information, and technologies have become key target areas for food-policy support programs.<sup>28</sup> However, it remains doubtful whether those programs can make significant progress and overcome the food security problem in Indonesia.

This is why the author argues that it is necessary to develop another mechanism to support food security programs: through the promotion of GI protection for agricultural products. Supporting food security based on GIs is one of the best ways to achieve this since GIs are typically used for agricultural products, foodstuffs, wine and spirit drinks, and industrial products. The promotion of GIs for agricultural products will give locals opportunities to develop local agricultural products as food security. It will also support the target of the Indonesian Food Law of 2012 through its emphasis on food security -having to be based on optimal utilization of local resources and performed with food diversification and prioritization of domestic food production. GIs could develop local and domestic agricultural production, increase local income, add to the economic value of local products and generate many other benefits. GIs could also provide a trade benefit in generating market appeal, and a non-trade benefit of promoting local agricultural traditions and methods.<sup>29</sup>

### 3. GI DEFINITION AND PROTECTION IN INDONESIA

#### 3.1 GI Definition

GIs are one form of industrial property, a term that is not limited to industry and commerce but which also applies to the agricultural and extractive industries, as well as to all manufactured or natural products, such as "wines, grain, tobacco leaf, fruit, cattle, minerals, mineral waters, beer, flowers and flour".<sup>30</sup>

According to the World Intellectual Property Organization (WIPO), a GI is a sign used on goods that have a specific

<sup>24</sup>Nicholas Rada, Anita Regmi, "Trade and Food Security Implications From the Indonesian Agricultural Experience," WRS-10-01 Economic Research Service/USDA, 2010, pp.2.

<sup>25</sup>Dalila Cervantes-Godoy, Joe Dewbre, "Economic Importance of Agriculture for Sustainable Development and Poverty Reduction: Findings from a Case Study of Indonesia", *Paper for Global Forum on Agriculture, Policies for Agricultural Development, Poverty Reduction and Food Security*, 29-30 November 2010, pp.7

<sup>26</sup>Id, pp. 30.

<sup>27</sup>Indonesia Cabinet Secretary, "Indonesia's Food Prices are Still High", 27 January 2016, <http://setkab.go.id/en/indonesias-food-prices-are-still-high-president-jokowi/>

<sup>28</sup>Ministry of State secretariat of the Republic of Indonesia, [http://www.setneg.go.id/index.php?option=com\\_content&task=view&id=10643&Itemid=55](http://www.setneg.go.id/index.php?option=com_content&task=view&id=10643&Itemid=55)

<sup>29</sup>Michael Blakeney, *Intellectual Property and Food Security*, Chambrige:CABI, 2009, pp.184

<sup>30</sup>WIPO, "Geographical Indication : an Introduction", *WIPO Publication 952*, 2013, p. 6.

geographical origin and possess certain qualities or a reputation that are due to that place of origin".<sup>31</sup> They may highlight particular qualities of a product, which are due to natural (e.g., race, variety, soil, climate, etc.) and human factors, such as specific manufacturing skills and traditions, found in the place of origin of the products. In order to function as a GI, a sign must identify a product as originating in a given place and the qualities, characteristics or reputation of the product should be essentially due to the place of origin. Since the qualities of product depend on the geographical place of production, it is evident that there is a clear link between the product and its original place of production.<sup>32</sup>

Article 22 (1) of the Agreement on Trade Related Aspect of Intellectual Property Rights (TRIPS) defines GIs as:

*indications, which identify a good as originating in the territory of a member, or a region or locality in that territory, where a given quality, reputation or other characteristic of the good is essentially attributable to its geographical origin.*

Indonesia has also adopted this definition in the new Indonesian Trademark Law (Law No. 20/2016)<sup>33</sup> and the Government Regulation on GI (PP 51/2007).<sup>34</sup> Article 1(1) of Government Regulation on Geographical Indication defines GI as:

*a sign which indicates the place of origin of goods, which due to its geographical environment factors, including the factor of the nature, the people or the combination of the two factors, gives a specific characteristics and quality on the goods produced there in.*<sup>35</sup>

While, the new Indonesian Trademark Law (Law No. 20/2016 adds the product and reputation on GI definition by defining GI as:

*a sign which indicates the place of origin of goods and/or products which is due to its geographical environmental factors including the factor of the nature, people or the combination of these two factors, gives reputation, quality, and specific characteristics on the goods and/or products produced there in.*<sup>36</sup>

Based on the above definition, GI is perceived to be a geographic term used in relation to a product indicating three aspects: (1) its place or area of origin; (2) qualities or characteristics of the products; and (3) qualities or

characteristics due to the geographical and human characteristics of the place of origin.<sup>37</sup>

However, the definitions of GI in the TRIPS Agreement, the Indonesian Trademark Law, and the Government Regulation on GI are different in some aspects. The definition of GI in Article 1.6 of the Indonesian Trademark Law uses the term "sign". While under the TRIPS Agreement, for a GI to be protected, it has to be an "indication" that may not necessarily be the name of a geographical place on earth.<sup>38</sup>

Moreover, the TRIPS definition includes GI protection for products having specific characteristics because it considers the natural aspects only and excludes the human factor influence. On the contrary, the scope of the GI definition in Article 1.6 of Indonesian Trademark Law differs from TRIPS in so far as the GI definition covers all products. However, the Indonesian GI definition only provides protection for products achieving specific characteristics because of the natural and the human factor influence, as well as the combination of both. This scope is similar to Article 2(1) of the Lisbon Agreement:

*the geographical name of country, region or locality, which serves to designate a product originating therein the characteristic qualities of which are due exclusively or essentially to geographical environment, including natural and human factor.*

The scope of the GI definition in Indonesian Trademark Law seems broader than the TRIPS GI definition because of the inclusion of the human aspect. However, as long as the GI regulation complies with TRIPS's minimum standard, any member of TRIPS can provide a broader scope of protection, which would then allow GI to cover any goods, whether natural, agricultural, manufactured or human made.

### 3.2 GI Protection in Indonesia

According to Article 22.1 of TRIPS, there is obligation for TRIPS Members to provide the legal means for GI protection:

*In respect of geographical indications, Members shall provide the legal means for interested parties to prevent: (a) the use of any means in the designation or presentation of a good that indicates or suggests that the good in question originates in a geographical area other than the true place of origin in a manner which misleads the public as to the geographical origin of the good; (b) any use which constitutes an act of unfair competition within the meaning of Article 10bis of the Paris Convention (1967).*

However, TRIPS does not specify the legal means necessary and thus leaves TRIPS Members free to decide on the form of protection of GIs at the national level.

<sup>31</sup>WIPO, "Geographical Indication", [http://www.wipo.int/geo\\_indications/en/](http://www.wipo.int/geo_indications/en/), viewed on 2 January 2016.

<sup>32</sup> Id.

<sup>33</sup>Law No 20/2016 regarding Trademark and Geographical Indication has been enacted on 25th November 2016 in order to amend and replace Law No 15/2015 regarding Trademark.

<sup>34</sup>The Government Regulation on GI (PP 51/2007) issued on 4th September 2007 is the implementation rules of previous Indonesian trademark law (Law No 15/2015).

<sup>35</sup>Yasmon Rangkayo Sati, *Laws on the Republic of Indonesia on Intellectual Property Right*, ShortCUT Gagas Imaji : Jakarta, Indonesia, 2003, pp. 128.

<sup>36</sup> Article 1 (6) of Indonesian Trademark Law (Law No 20/2016).

<sup>37</sup>Surip Mawardi, "Establishment of Geographical Indication Protection System in Indonesia, Case in Coffee," *Paper of WIPO/GEO/SOF/09/3*, Worldwide Symposium On Geographical Indications jointly organized by the World Intellectual Property Organization (WIPO) and the Patent Office of the Republic of Bulgaria, Sofia, June 10 to 12, 2009, p. 11.

<sup>38</sup> Mark Davidson, "Geographical Indication", *Paper*, 2007, p. 3.

According to Article 1.1 of TRIPS, Members are allowed to determine their own legal system and practices of GIs, evident from how “.....members shall be free to determine the appropriate method of implementing the provisions of this Agreement within their own legal system and practice.”

Consequently, GI implementation occurs in the most diverse and uncoordinated manner. The different dimensions of GI are closely embedded in the different legal and institutional frameworks, which are mainly divided into three models: (a) laws focusing on business practices such as unfair competition, misleading of consumers passing off; (b) protection under trademark law; (c) sui generis law or special protection such as under collective, certification, guarantee marks and prior recognition requirement. In order to comply with the GI provisions in TRIPS,<sup>39</sup> Indonesia has chosen to protect GI under its trademark system.

Article 53(2) of Indonesian Trademark Law requires registration for the granting of legal protection. It is clear that *the first to file principle* is applied to protect GI, such that GI shall be protected after registration. Article 53 (3) of Indonesian Trademark Law also specifies two eligible parties<sup>40</sup> that can apply for GIs registration:

- a. an institution that represents the society in the area which produces the goods concerned, which consists of parties who undertake business

<sup>39</sup>As Indonesia has ratified *the Agreement Establishing World Trade* and its attachments such as *Trade Related Aspects of Intellectual Property Right (TRIPs)* by enacting the Law No 7/1994, Indonesia must implement TRIPS obligation including the obligation to protect GI in national level.

<sup>40</sup>Concerning the eligible parties to register GI, there are conflicting regulations between Indonesian Trademark Law and Government Regulation on GI because Indonesian trademark Law excludes merchants who sell the goods and groups of consumers of the goods concerned, while Government Regulation on GI includes them. Moreover, Indonesian Trademark Law specify two parties to eligible register GI, while Article 5 (3) of Government Regulation on GI specifies three parties that include:

- a. an institution that represents the society in the area which produces the goods concerned, which consists of: a) parties who undertake business on goods of natural products or natural resources; b) producers of agricultural products; c) people who make handicraft or industrial products; or d) merchants who sell the goods.
- b. an institution that is given the authority to do so.
- c. groups of consumers of the goods concerned.

In the case of legal order conflict between trademark law and government regulation on GI, there is a general principle of derogation rules to resolve this conflict of norms i.e. “*lex superior derogat lex inferior*” (the higher ranking law prevails over the lower ranking law) – see more in JH Jackson, “The Status of Treaties in Domestic Legal System : A Policy Analysis”, *AJIL*, Vol. 86, 1992, p.316-318). Under this principle, since the trademark law has higher ranking, trademark law prevails over the government regulation on GI. Thus, merchants who sell the goods and group of consumer of the goods concerned, are not capable anymore to register GI under Article 5 (3) of Indonesian Trademark Law.

on goods of: (a) natural products or natural resources; b) handicraft (c) industrial products;

- b. Provincial or Municipal governments.<sup>41</sup>

According to Article 53(2) of the Indonesian Trademark Law, individuals cannot register and hold the ownership of GIs. This indicates that GIs are clearly a communal or collective right, which is not capable of ownership by any individual but rather a fixture to the region or locality.

The application process in Indonesia is the most critical obstacle standing in the way of achieving GI protection. This is because GI registration is much more complex than trademark registration, which requires applicants to: (a) register the product name and GI name; (b) identify in detail the distinguishing characteristics and quality of the product; (c) describe the characteristic or quality that relates to the originating location of production; (d) describe the geographical environment, and the natural and human factors contributing to the making of the products, (e) provide an acknowledgement of the GI product from the community of origin; and (f) including the production process and quality testing method.<sup>42</sup>

The second obstacle concerning the application process is the requirement to provide a book of requirements (specification book), which is difficult to create. In the book of requirements, a GI applicant must describe and define the typical characteristics of the product, which distinguishes it from other products in the same category, provide the description of the relationship of the geographical factor to the qualities or characteristics, as well as, provide a description of the method used to examine the characteristics of the product. As there is no database of GI identification in Indonesia, it is also difficult to determine the description of the history and tradition of GI use, social acknowledgement related to the GI use, and the description of the border of the geographical area.

In addition, the producers must also register to use and produce GIs.<sup>43</sup> Hence, the granting of GI registration is unlikely to give an automatic exclusive right to use and produce GI products. There seems to be an additional burden for an applicant to register twice for GI registration and then second, for using and producing GIs. In order to use and produce GI items, the parties must comply with the stipulations in the book of requirements as a basis to determine the infringement of GI rights.

Prior to or on the date of application for registration of a GI, if a sign has been used in good faith by another party who has no right to register, the party who has been acting in good faith may continue to use the sign concerned for a period of 2 (two) years as from the date

<sup>41</sup>The new Indonesian Trademark amends and makes clear “an institution that is given the authority to do so” regulated in previous trademark law (Law 15/2001) by identifying provincial or municipal government as the authorized institutions to register GIs.

<sup>42</sup>Article 6(3) of Government Regulation on GI.

<sup>43</sup>Article 15 (1) of Government Regulation on GI.

of its registration as a GI.<sup>44</sup> However, the regulation does not further explain how the trademark owners will acknowledge the GI. Consequently, the question remains whether or not the rights of the owners of such trademark registrations will be limited in terms of enforcing their trademark rights against any use by the community that represents the GI concerned.

If the application meets the registration requirements, the Directorate General of Intellectual Property ("DGIP")<sup>45</sup> will grant the certificate of registration, according legal protection to the GI products. A registered GI thus enjoys legal protection, which persists as far as the features and/or the quality on which the protection has been conferred still exists.<sup>46</sup>

The right holder of a GI may file a lawsuit against an unlawful user of the GI, in the form of a claim for damages and an order interdicting the usage, as well as disposal of labels of the GI concerned, which have been unlawfully used.<sup>47</sup> To prevent any further loss on the party whose right has been infringed, a judge may order the infringer to cease any activities of producing, multiplying, and may order the destruction of labels of the GI, which have been unlawfully used.<sup>48</sup>

GI protection under the Indonesian Trademark Law is likely to be unsuitable because of the different natures of, and conflict between, trademarks and GIs. While the essence of trademarks and GIs is that they both regulate the use of signs in the marketplace by enabling their communicative function,<sup>49</sup> and are built upon existing reputation, they have significant distinctions between them<sup>50</sup> and are completely different legal concepts<sup>51</sup> Trademark is a sign used by a company to distinguish similar goods and services from those of other companies and gives the owner the right to exclude others from using it. However, a GI tells consumers that a product is made in a certain geographical area and has certain characteristics influenced by geographical factors. It may be used by all producers who make their products in the place designated by a GI and whose

products share typical qualities.<sup>52</sup> GIs can indicate many origins of goods, as long as all origins emanate from the same geographical area, whereas a trademark must indicate only one origin of the source of goods.<sup>53</sup>

Furthermore, trademarks and GIs differ in the requirement of distinctiveness. As compared to a trademark, which requires distinctiveness, GIs lack the requisite distinctiveness because a GI describes the geographical origin of the product rather than its trade or commercial origin.<sup>54</sup>

Additionally, trademarks and GIs also differ in function. Trademarks are used to distinguish particular goods and services from similar products, while GI signs are used to distinguish products from a particular region from similar products coming from outside that region. Trademarks function as the main communication between a manufacturer and the consumers to give information about quality, whereas GIs underline the geographical origin of a good and the characteristics derived from it.<sup>55</sup> GIs are linked to something more than mere human creativity but includes topography, climate or other factors independent from human creativity, while trademarks are mostly the result of only human creativity.<sup>56</sup>

Trademarks and GIs also differ in their duration of protection. In order to remain protected, a trademark must be renewed within a certain period of time.<sup>57</sup> In contrast, GIs can obtain perpetual protection and do not need to be renewed to gain validity, as long as the specific characteristics still exist.<sup>58</sup>

Trademarks and GIs also differ in the type of rights they are. GIs are clearly a collective right which are not capable of ownership by any individual, but is a fixture to the region or locality which it represents, while trademarks are personal properties.<sup>59</sup> As property, trademarks can be licensed to third parties,<sup>60</sup> whereas licensing of GIs is banned. Since GIs cannot be licensed or sold to producers outside the region, some argue that GI is not property.<sup>61</sup> GIs are categorically not associated with private ownership but ought to instead be characterized as a right to use.<sup>62</sup> As it can never be privately owned, a

<sup>44</sup>Article 68 (1) of Indonesian Trademark Law.

<sup>45</sup>The Directorate General of Intellectual Property(DGIP) is the governmental institution which has the authority to administer and develop the IP system in Indonesia. The DGIP operates under the Ministry of Law and Human Rights.

<sup>46</sup>Article 61 of Indonesian Trademark Law and Article 4 Government Regulation on GI.

<sup>47</sup>Article 69 (1) of Indonesian Trademark Law.

<sup>48</sup>Article 69 (2) of Indonesian Trademark Law.

<sup>49</sup>Dev Saif Gangjee, "Quibbling Siblings: Conflicts between Trademarks and Geographical Indications", *Chicago-Kent Law Review*, volume 2, 2007, at 6.

<sup>50</sup>Stephen Stern, 'Geographical Indications And Trade Marks: Conflicts And Possible Resolutions', *Paper At WIPO Symposium On Geographical Indications*, San Francisco, California, July 9 To 11, 2004, pp. 3

<sup>51</sup>Jeremy Phillips, *Trademark Law – A Practical Anatomy* (Oxford University Press, 2<sup>nd</sup> ed. 2003), see also Bernard O Connor, above note 27, pp. 107

<sup>52</sup>Clark W. Lackert, "Geographical Indications: What Does the WTO TRIPs Agreement Require?", *Trademark World*, August, 1998, pp. 23.

<sup>53</sup>WIPO, *Summary of Replies to the Questionnaire on Trademark Law and Practice*, at 80, WIPO Doc. SCT/14/5 Rev. (Nov. 1, 2005).

<sup>54</sup>Id.

<sup>55</sup>Ernes Oliva, et.al, "Agricultural Produce of Istria Used in Regional Branding : Strategic Concept", *Paper*, 22nd Cromar Congress, Marketing Challenges in New Economy, 2011, pp. 3.

<sup>56</sup>Id

<sup>57</sup>In Indonesia, the period of trademark protection is 10 years and can be renewed for the next 10 years, see Article 35 (2) of Indonesian Trademark Law.

<sup>58</sup>Article 58 (1) of Indonesian Trademark Law.

<sup>59</sup>WIPO, note 59.

<sup>60</sup>See Article 42 (1) of Indonesian Trademark Law.

<sup>61</sup>Jeremy Phillips, note 57.

<sup>62</sup>EC Response to the Checklist of Questions: Review under Art 24.2, IP/C/W/117/Add.10 (Mar. 26, 1999).



GI right differs from other IP rights.<sup>63</sup> The protection of GIs under trademark law remains controversial, since some still believe that GIs are not IP<sup>64</sup> and thus should not be subject to the IP regime.

#### 4. GI PROTECTION INITIATIVES FOR AGRICULTURAL PRODUCTS

The first project in developing GIs for agricultural products was initiated by the municipal of South East Bali to protect Kintamani Coffee. This process of registering GIs for Kintamani Coffee took six years (from 2002 to 2008).<sup>65</sup> According to the data of GI registration at the Indonesian IP Office, namely the DGIP, there were two registered agricultural products for GIs in 2010, namely Muntok White Paper, Gayo Coffee, Sumedang Forest Tobacco, and five agricultural products were registered as GIs (Sumedang Forrest Tobacco, Sumedang Mole Tobacco, Sumbawa Horse Milk, Lombok Kale, Sumbawa Honey) in 2011. The GI registration number remained the same from 2012 (Adan Krayan Rice, Flores Bajawa Coffee, Purwaceng Dieng, Carica Dieng, Alor Vanili) to 2014 (Robusta Coffee of Lampung, Temanggung Srintil Tobacco, Kubu Bali Cashew, Kulonprogo Jogja Palm Sugar, Java Sidoro Sumbing Coffee) with a total of ten registrations. The same number of registrations also occurred in 2013 and 2015 with eight registrations each. In 2016, the registration increased by 37.5% with eleven registrations.

Based on the GI registration data, the registrations are mainly dominated by domestic agricultural products (39 registrations), with only six foreign products registered (Parnigiano Reggiano, Champagne, Pisco, Lamphun Brocade Thai Silk, Tequila, and Grana Padano). The non-agricultural products registered consisted of three handicrafts (Jepara wood carving, Gringsing Bali Woven, Mandar Silk Woven Fabric) and four processed products (Sumbawa Horse Milk, Sidoarjo Milky Fish and Kulonprogo Palm Sugar). This means that 75% of registrations are dominated by agricultural commodities, 11.54% by foreign products, and 13.46 % by non-agricultural products.

The number of GI registrations for staple food only stands at three (Adan Krayan Rice, Cianjur Rice and Cilembu Sweet Potato) whereas a surprising 35% of GIs are dominated by coffee products that includes Kintamani Bali coffee, Gayo Coffee, Flores Bajawa Coffee, Kalosi Enrengkang Coffee, Java Preanger Coffee, Java Ijen

Raung Coffee, Java Sidoro Sumbing Coffee, Sumatera Simalungun Coffee, Sumatera Mandailing, Lampung Coffee, Liberika Tungkal Jambi Coffee, Liberika Rangsang meranti Coffee, Toraja Coffee, and Sumendo Coffee (14 registrations).

Overall, there have been a total of 46 GI registrations for Indonesian products, which are listed in **Annex A** to this paper.

Indonesia has since encouraged its local government and local community to register GIs for agricultural products as it regards the first step in building the GI system to empower the local community or farmer's organization. The involvement of the local community is also important, given that a GI is a communal right that belongs to society.

For GI initiatives, the government has encouraged local communities to establish GI organizations such as the GI Protection Community, which is based on pre-existing traditional producers or farmers organizations as representatives of the community. The GI Protection Community will be an important organization because it bears the duty of managing the preparation and registration, promoting, engaging in marketing activities, controlling the use of the product and product quality, including the regulation and avoidance of social conflicts related to GI ownership and utilization.

Several regions have since established the GI Protection Community (GIPC) such as GIPC of Kopi Kintamani Bali, GIPC of Gayo Coffee, GIPC of Sumedang Tobacco, GIPC of Flores Bajawa, GIPC of Purwaceng Dieng, GIPC Minahasa Cloves. The most GI registrations and ownership are held by GIPC. However, there are also GI registrations and ownership held by local governments, such as the Muntok White Pepper registered by the Agency of Management, Development and Marketing for Pepper, the province of Bangka Belitung and by networks such as Network of Sumbawa Flores Honey. Some GI registrations and ownership are also held by associations such as the Association of Sumbawa Horse Milk Development, the Lombok Kale Commodity Association, Association of Indigenous People for Adan Krayan Protection, the Association of Vanili Farmers of Alor Islands, the Association of Cilembu Sweet Potato Agrobusiness.

The first initiative of GI protection to embark on should be empowering local communities or farmer's organizations. This should be followed by efforts to define the unique and specific characteristics of a product, improve the quality of products, undertake remote sensing studies to provide information on estimated areas of plantation, distribute growing areas and distribute production-based agrosystem, train GIs, and prepare a "Specifications Book" necessary for GI registration.<sup>66</sup>

<sup>63</sup> Louis Lorvellec, "You've Got to Fight for Your Right to Party: A Response to Professor Jim Chen", *Minn. J. Global Trade*, Vol.65, 1996, pp.69.

<sup>64</sup> Eleanor K. Meltzer, 'Pass the Parmesan? What You Need to Know about Geographical Indication and Trademarks', *Intellectual Property Feature*, June/July 2002, pp.19.

<sup>65</sup> Surip Mawardi, "Establishment of Geographical Indication Protection System In Indonesia: Case In Coffee", *Paper WIPO/GEO/SOF/09/3*, Worldwide Symposium on Geographical Indications jointly organized by WIPO and the Patent Office of the Republic of Bulgaria, 2009, p.2.

<sup>66</sup> Surip Mawardi, et al, "Developing Geographical Indication Protection in Indonesia: Bali Kintamani Arabica Coffee as a Preliminary Case", Paper presented in Seminar on Geographical

Another initiative to embark on is to establish internal and external controls to ensure the quality of GI products since the most vital factor for ensuring GI protection is in ensuring the qualities or characteristics of GIs. Although ensuring the quality of GI as a controlling mechanism is difficult due to the collective nature of GI ownership, combining auto-control or self-control by each producer, control by GI organization, and external control by National GI Expert Team of the DGIP will help to solve the problem of quality control. The control mechanism must be equipped with rules and regulations which are applicable to the GI users. Having a set of common rules for GI utilization among producers is crucial to prevent misuse or expropriation, avoid unfair production and commercial practices, prevent abuse or damage to the GI reputation, ensure quality of the products, direct the behavior of local producers, and coordinate support and cohesion to create, preserve or improve the GI product's reputation and name value.<sup>67</sup>

Furthermore, another initiative to consider is the promoting and marketing of GIs, which is important in improving market access and establishing a direct business partnership between farmers and traders or exporters. This is essential to obtain guaranteed sales and better prices for high-quality products. Keeping in constant communication with both current and potential consumers and providing information on the specific quality and characteristics of the GI product will increase consumer willingness to purchase and pay for GI products.<sup>68</sup> The initiatives to empower the integrated collective (by a GI organization) and individual marketing (by its members) are based on having the right balance and coherence.

## 5. GI BENEFIT FOR AGRICULTURE DEVELOPMENT

Generally, GIs function as a tool of product differentiation, an indication of a guarantee of quality, and an indication of source, an advertisement for the product, and even promotion of a country. GIs also assist in rural development and protection of traditional knowledge.<sup>69</sup> Other benefits of GIs include assisting marketing strategies in both domestic and international spheres, adding value to the potential GI products, improving producers' livelihood, developing rural areas on the basis of the good reputation of their quality, improving the reputation of the GI product in global trade, ensuring equal treatment and providing a tool for promotion abroad, and avoiding unfair competition, misrepresentation or misleading and deceptive

conduct.<sup>70</sup> For the purposes of this paper, reputation refers to the opinion consumers have of a given product, which generally requires a substantial period of time to be formed.<sup>71</sup>

A benefit of a GI is that it serves as an identification of source, for which the GI protection will indicate the geographical origin of the Indonesian agricultural products. Numerous Indonesian agricultural products with their specific quality are designated by their place of origin, which is the geographical name of the place where they were developed such as Cianjur Rice, Toraja Coffee, Banda Nutmeg, Bangka White Pepper, Tuban Starfruit, Palu Onion, Batu Apple. The quality of Indonesian agricultural products are commonly associated with various geographical aspects such as natural factors, local tradition, culture, and human factors as the main factors which lead to excellence and a good reputation of the products. This association establishes a link between the quality, origin, and reputation of the products as derived from their place of origin.<sup>72</sup>

By functioning as an identification of source and product differentiation, GI permits the identification of products with unique qualities and characteristics based on geographical factors and distinguishes products from other similar products on the market. Without a GI to distinguish the products, producers of high-quality products may not be incentivised to remain in the market as undifferentiated agricultural products may tend to be sold at the same price.<sup>73</sup>

Furthermore, GIs serve not only as an indication of origin, but also as a reference to quality. The environment, by virtue of its soil composition, climate, biodiversity, confers specific qualities and characteristics on the products, making them unique.<sup>74</sup> These qualities can also be determined in relation to the product's nutritional properties, flavor, appearance, or the process and raw materials used to produce it.<sup>75</sup> In addition, the product's characteristics which are associated with geographical factors can be determined by its physical or chemical or organoleptic traits.<sup>76</sup> The qualities or

Indication: A Land of Opportunities", Hanoi (Vietnam), 15 – 16 November 2005, pp. 3-10.

<sup>67</sup> Id

<sup>68</sup> Id

<sup>69</sup> Mevhibe Albayrak, Melda Ozdemi, "The Role of Geographical Indication in Brand Making of Turkish Handcrafts", *International Journal of Business and Social Research (IJSR)*, Volume -2, No.-3, June 2012, pp. 112-113.

<sup>70</sup> Surip Mawardi, "Advantages, constraints and key success factors in establishing origin- and tradition-linked quality signs: the case of Kintamani Bali Arabica coffee geographical indication, Indonesia," *Paper for case study of Case study on quality products linked to geographical origin in Asia* carried out for FAO, 25 May 2009, pp. 7.

<sup>71</sup> Monique Ngo Bagal, Massimo Vittori, "Practical Manual on Geographical Indications for ACP Countries, CTA and origin", Agridea-Switzerland, 2011, pp. 12

<sup>72</sup> Laurence Bé rard and Philippe Marchenay, "Local products and geographical indications: taking account of local knowledge and biodiversity", *International Social Science*, No. 187, 2006, pp. 110.

<sup>73</sup> Chuthaporn Ngokkuen and Ulrike Grote, "Challenges and Opportunities For Protecting Geographical Indications In Thailand", *Asia-Pacific Development Journal*, Vol. 19, No. 2, pp. 94, December 2012.

<sup>74</sup> Monique Ngo Bagal, Massimo Vittori, note 77.

<sup>75</sup> Id.

<sup>76</sup> Id.

characteristics of the product may comprise of attributes such as color, texture or fragrance that may be regarded as neutral or even unfavorable to consumers.<sup>77</sup> Moreover, geographical factors such as local breeds and plant varieties, traditional equipment, and human factors such as know-how and traditional knowledge, traditions, culture and philosophy play a key role in forming the qualities, characteristics, and reputation of these products.<sup>78</sup> Overall, these are important factors in distinguishing a product from the same product from other areas.

Since GIs function as an indication of quality and a guarantee, it enables agricultural producers to sell a considerable quantity of their products and thus becomes a worthwhile marketing tool. As an indication and guarantee of quality, a GI confers benefits onto consumers by ensuring the continued quality of a product and this generates a positive perception for the product amongst consumers. Since consumers have a positive perception towards GI products, GIs can play an important role in improving market demand and access for these agricultural products.<sup>79</sup> This will allow a GI to become an effective tool, since it allows producers to gain competitive advantages, achieve market recognition and differentiate their products from those produced elsewhere. A GI also helps producers to gain market power because if a product bears a GI, it must have special qualities attributable to its geographical source.<sup>80</sup>

By developing GIs, agricultural producers also create an image of “exoticism” or “scarcity” that enables them to capture premium prices for their products, which would otherwise be ascribed a commodity status.<sup>81</sup> The origins of exoticism comes from the history and tradition associated with the production processes used in the specific geographical areas from which the products originate.<sup>82</sup> The exoticism may be derived from the mystique surrounding the product, human diligence, heroism, morality, or sacrifice<sup>83</sup> in producing the agricultural products, and unique characteristics that are attributed to a unique production carried out in a particular geographical area.<sup>84</sup> For instance, the first Indonesian GI product, that is, Bali Kintamani Coffee has specific characteristics attributed to it, due to the effect of a farming process organized by a unique farmer

organization called “Subak Abian”<sup>85</sup>, established by and operated under Balinese Hindu Philosophy.<sup>86</sup> Also, the farming system in Kintamani (a highland of the south east Bali) such as organic farming, single stem pruning, shade trees application, as well as the diversification with tangerines is expected to be a unique factor which influences the taste of coffee produced in the Kintamani area.<sup>87</sup> In addition, the Kintamani territory is favorable for products grown by the Balinese people who strongly believe in the Hinduism philosophy of “Tri Hita Karana”<sup>88</sup> which guides them to adopt the tradition of cultivating land and applying farming techniques in respect to their God, humans and the environment. The combination of specific local characteristics, agricultural farming, processing practices and philosophical aspects, generates a high quality of Kintamani coffee beans which come with a specific taste.<sup>89</sup>

Such added economic value of agricultural products can then provide for better contributions to food security, development of the agro-economy and agro industry. It will also encourage professionalism and enhance the local skills in producing and improving the quality of agricultural products, thus increasing the competitiveness of local agricultural products. The heightened competitiveness of these products may then eradicate one of the problems of food security, that is, the imported agricultural products being more competitive than local products.

By enhancing competitiveness of local agricultural products and qualifying products that are difficult to transfer to other territories, GIs can be better understood as a catalyst for processes and endogenous territorial development. A GI is already recognized as a qualification strategy that emphasizes on the socio-cultural aspects of a territory where the product is made, ensuring the development of agribusinesses in that territory. With these added efforts, GI will then establish itself as a counterpoint to general dynamics of the agri-food system in terms of standardization, globalization, and market concentration.

The added economic value of agricultural products will also attract more producers to enter the agricultural industry and potentially encourage existing producers to develop their small holder production modes or small scale enterprises (SME) to grow more efficient with greater plantations or bigger agro industries. Thus, this will help in maintaining the supply of products and improving the development of the agro-economy and agro-industry. This will likely implement the provisions of the Indonesian Food Law of 2012 that require food

<sup>77</sup>David Vivas Eugui, Christoph Spennemann, ‘The Treatment of Geographical Indications in Recent Regional and Bilateral Free Trade Agreement, in Meir Perez Pugatch (eds), *The Intellectual Property Debate, Perspective from Law, Economic and Political Economy* (Edward Elgar, Cheltenham, UK, 2006, pp. 305.

<sup>78</sup> Id.

<sup>79</sup>Queen Mary Intellectual Property Research Institute, “The Relationship Between Intellectual Property Rights (TRIPS) and Food Security,” June, 2004, pp.39.

<sup>80</sup> Article 22 (1) of TRIPS Agreement.

<sup>81</sup>Sanjeev Agarwal, Michael J. Barone, “Emerging Issues for Geographical Indication Branding Strategies”, *MATRIC Research Paper05-MRP 9*, Januari 2005, pp. 2.

<sup>82</sup> Id

<sup>83</sup> Id, pp. 3.

<sup>84</sup> Id

<sup>85</sup>Jeffrey Neilson, Josephine Wright, Lyra Aklimawati, “Geographical Indications and value capture in the Indonesia Coffee Sector”, *Paper*, pp.11.

<sup>86</sup> Surip Mawardi, *note 76*, pp.3

<sup>87</sup> Id

<sup>88</sup>*Tri Hita Karana* (three happiness causes) has meaning of “harmonization of relationship to the God, human and environment.”

<sup>89</sup>Id, pp.7.

security to be primarily based on domestic production and local food availability.

Another benefit of GIs is that it enables better distribution of value along the production chain, moving from producers of raw materials to manufacturers and to those who help in diversifying the production. The diversification of agricultural production will ensure a better balance between supply and demand in the market, and provide better support to food distribution and availability. Thus, the protection of GIs for local agricultural products will support the food security program because such protection will promote the diversity of agricultural and food products. This is crucial as the diversity of agricultural and food products is one of the key steps to ensuring food availability, which ultimately affects food security.

In addition, GIs improve product demand and boost consumer confidence for it. Today, there is a growing demand among consumers for quality products with specific characteristics. As the demand of GI products comes from both domestic consumers and those abroad, the quantity of agricultural exports has been increasing. According to Article 34 of Indonesian Food Law of 2012, products other than food can be exported having regard to domestic consumption necessity and national interest, while food can be exported only after fulfilling the national food supply requirements, particularly for staple food consumption. The ability to export thus indicates the ability of country to fulfill the national demand and ensures food availability, since Indonesia prohibits producers from exporting agricultural products unless the national supply is met.<sup>90</sup>

The protection of GI for agricultural products can affect tourism in the country since numerous tourists like to visit the GI location in order to understand the production process of the GI products and obtain the original products. Thus, GIs become an effective advertisement and promotion tool of the country. The increase in the number of tourists will further affect the country's development.

GIs also have an important role to play in the regeneration of the countryside since they ensure that agri-foodstuffs are produced in a way that conserve local plant varieties, reward local people, support rural diversity and social cohesion, and promote new job opportunities in production, processing and other related services. This helps to ensure that the needs of today's population are met, while safeguarding natural resources and traditional skills for generations to come.

GIs provide for the growth of the agro-industry and related investments. If there are various unique products in a locality or region, it will attract investors to establish related businesses in these regions, thus increasing the

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<sup>90</sup>According to Article 34 of Indonesian Food Law of 2012, products can be exported with regard to domestic consumption necessity and national interest, the food can be exported only after fulfilling national food supply and staple food consumption necessity.

growth of investments in agro-industry. Investment in GI products tend to be from the rural, agricultural and handicraft sectors, thus boosting the local development.<sup>91</sup> GI protection will also ensure that investments are more secure, thus raising levels of investment, contributing to the growth of agricultural industry and improving the scale of local economy development. Furthermore, investments play an important role in economic growth in local areas by generating new employment opportunities, boosting local revenue, adding economic value to products, reducing migration from rural to urban areas, bridging the income gap between the rural and urban areas, and positively impacting income distribution.<sup>92</sup> Such local economic development ensures that important privileges are given to local agricultural producers who earn their living from production, such that they can channel these benefits for further rural development

Moreover, GI promotion will help locals remain and live in rural areas. It will also create better-paid employment in rural areas and motivate young people to continue to be involved in agricultural activities through the generation of premium prices. Additionally, GIs will ensure the permanence of indigenous groups, cultivating the tradition of habits being passed from generation to generation, thus ensuring sustainable agricultural development of such communities. This will allow GIs to become a tool of socio-economic harmonization, since GIs can maintain and develop activities in these disadvantaged rural areas and increase local economic development. In the long run, this can potentially alleviate the wave of urbanization. Increasing urbanization involves people being more likely to adopt new diets, particularly consuming more meat, fats, and refined cereals, and fewer traditional cereals, vegetables and fruit.<sup>93</sup> Reducing urbanization may also erase the many social problems associated with urbanization.<sup>94</sup>

Lastly, GIs function as a tool for protecting traditional knowledge. This implies that GI products are the result of not only the natural materials of a region, but are also influenced by cultural factors and traditional knowledge accumulated over centuries. According to Bruce, GIs are achieving greater recognition for the place of the product's origin, which is established by the history of that region, its inhabitants, culture, and reputation.<sup>95</sup> GIs also incentivise efforts to preserve and develop traditional plants, natural resources, biodiversity, soil and the surrounding environment. Felix Addor highlights

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<sup>91</sup>Dwijen Rangnekar, "the Socio-Economics of Geographical Indications: A Review of Empirical Evidence From Europe," *Paper*, 2004, pp. 1.

<sup>92</sup>Id.

<sup>93</sup>Jules Pretty, "Overview to Four Volumes: Sustainable Agriculture and Food", in Jules Pretty (ed), *Sustainable Agriculture and Food*, Volume I, London : EarthScan, 2008, pp. xvii.

<sup>94</sup>David Satterthwaite, Gordon McGranahan, and Cecilia Tacoli, "Urbanization and its Implications For Food and Farming" *Philos Trans R Soc Lond B Biol Sci.*, Vol. 365, 2010, pp. 2811.

<sup>95</sup>Cited by Luan Carlos Santos Silva et al, *note 8*.

that 'GIs are based on collective traditions and a collective decision-making process; they reward traditions while allowing for continued evolution; they emphasize the relationship between human efforts, culture, land, resources and environment'.<sup>96</sup> According to FAO, the characteristics of agricultural products may involve specific local species or breed, local feeding, local processing, storage, native local plant varieties, local soil and climate conditions, traditional practices and local know-how that play an important role and give special quality attributes to flavor, aroma, color, texture<sup>97</sup> Thus, GIs may help to preserve the local wisdom and philosophy, which bears relation to the local agriculture system, as well as, maintain traditional plantation and its intrinsic values, thus keeping alive local culture and traditions.

## 6. CONCLUSION

It is important to ensure agricultural development by increasing the productivity and competitiveness of agricultural products using the GI mechanism. Promoting GIs may increase the value of agricultural products by incorporating territory specific cultural, environmental and social qualities into the production, processing and development of unique local, niche and special agricultural products. Since GIs are recognized as a qualification strategy that emphasizes the socio-cultural territory where the agricultural product is made, GIs will ensure the development of agribusiness and local development. GI protection will then provide benefits for increasing productivity, improve the exports of GI products, create employment, add economic value to the products, and increase the diversity of supply of natural and unique quality products.

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<sup>96</sup>Felix Addor, "Geographical Indications – Where Now After Cancun?", *Paper* presented at OriGIn, 2nd Meeting, Alicante, 27–28 November 2003, pp. 2.

<sup>97</sup>Emilie Vandecandelaere, et.al, *Linking People, Places And Products : a Guide for Promoting Quality Linked to Geographical Origin and Sustainable Geographical Indication*, Rome :FAO, 2009-2010, pp.55.

### Annex A

No	Products	Type of product	Registration Number	Date of Registration
1.	Kopi Arabika Kintamani Bali	Coffee	ID G 000000001	5 Dec 2008
2.	Mebel Ukir Jepara	Wood handcraft	ID G 000000003	28 April 2010
3.	Lada Putih Muntok	Pepper	ID G 000000004	28 April 2010
4.	Kopi Arabika Gayo	Coffee	ID G 000000005	28 April 2010
5.	Tembakau Hutan Sumedang	Tobacco	ID G 000000007	28 April 2011
6.	Tembakau Mole Sumedang	Tobacco	ID G 000000008	28 April 2011
7.	Susu Kuda Sumbawa	Horse Milk	ID G 000000010	15 Dec 2011
8.	Kangkung Lombok	Kale Vegetables	ID G 000000011	15 Dec 2011
9.	Madu Sumbawa	Honey	ID G 000000012	15 Dec 2011
10.	Beras Adan Krayan	Rice	ID G 000000013	6 January 2012
11.	Kopi Arabika Flores Bajawa	Coffee	ID G 000000014	28 March 2012
12.	Purwaceng Dieng	Herbal	ID G 000000015	20 July 2012
13.	Carica Dieng	Fruit	ID G 000000016	20 July 2012
14.	Vanili Kepulauan Alor	Vanilla	ID G 000000017	19 Oct 2012
15.	Kopi Arabika Kalosi Engrekang	Coffee	ID G 000000018	15 February 2013
16.	Ubi Cilembu Sumedang	Sweet Potato	ID G 000000019	24 April 2013
17.	Salak Pondoh Sleman Jogja	Fruit	ID G 000000020	21 June 2013
18.	Minyak Nilam Aceh	Oil	ID G 000000021	10 Sept 2013
19.	Kopi Arabika Java Preanger	Coffee	ID G 000000022	10 Sept 2013
20.	Kopi Arabika Java Ijen-Raung	Coffee	ID G 000000023	10 Sept 2013
21.	Bandeng Asap Sidoarjo	Processed Milkfish	ID G 000000024	9 Oct 2013
22.	Kopi Arabika Toraja	Coffee	ID G 000000025	9 Oct 2013
23.	Kopi Robusta Lampung	Coffee	ID G 000000026	13 May 2014
24.	Tembakau Srinthil Temanggung	Tobacco	ID G 000000027	13 May 2014
25.	Mete Kubu Bali	Cashew	ID G 000000028	21 July 2014
26.	Gula Kelapa Kulonprogo Jogja	Palm Sugar	ID G 000000029	21 July 2014
27.	Kopi Arabika Java Sindoro-Sumbing	Coffee	ID G 000000030	1Dec 2014
28.	Kopi Arabika Sumatera Simalungun	Coffee	ID G 000000032	20 February 2015
29.	Kopi Liberika Tungkal Jambi	Coffee	ID G 000000031	23 July 2015

30.	Cengkeh Minahasa	Clove	ID G 000000033	13 August 2015
31.	Beras Pandanwangi Cianjur	Fragrant Rice	ID G 000000034	16 Oct 2015
32.	Kopi Robusta Semendo	Coffee	ID G 000000035	20 Nov 2015
33.	Pala Siau	Nutmeg	ID G 000000036	20 Nov 2015
34.	Teh Java Preanger	Tea	ID G 000000037	23 Dec 2015
35.	Garam Amed Bali	Salt	ID G 000000038	23 Dec 2015
36.	Jeruk Keprok Gayo-Aceh	Orange	ID G 000000040	22 March 2016
37.	Kopi Liberika Rangsang Meranti	Coffee	ID G 000000041	2 May 2016
38.	Lada Hitam Lampung	Black Pepper	ID G 000000042	2 May 2016
39.	Kayumanis Koerintji	Cinnamon	ID G 000000043	26 May 2016
40.	Tunun Gringsing Bali	Woven fabric	ID G 000000046	18 July 2016
41.	Tenun Sutera Mandar	Silk woven fabric	ID G 000000047	9 Sept 2016
42.	Kopi Arabika Sumatera Mandailing	Coffee	ID G 000000048	9 Sept 2016
43.	Pala Tomandin Fakfak	Nutmeg	ID G 000000049	9 Sept 2016
44.	Jeruk Soe Mollo	Orange	ID G 000000050	21 Sept 2016
45.	Cengkeh Moloku Kie Raha	Clove	ID G 000000051	21 Sept 2016
46.	Mete Muna	Cashew	ID G 000000052	21 Sept 2016

## BIBLIOGRAPHY

- "Agricultural Sector of Indonesia", Indonesia Investments, <https://www.indonesia-investments.com/culture/economy/general-economic-outline/agriculture/item378?>
- C. Peter Timmer, "Food Security in Indonesia: Current Challenges and the Long-Run Outlook", *Working Paper Number 48*, Center for Global Development, November 2004.
- Carlos M. Correa, Quaker, "TRIPS-Related Patent Flexibilities and Food Security : Options for Developing Countries, Policy Guide," Geneva : QUNO-ICTSD, 2012.
- Chuthaporn Ngokkuen and Ulrike Grote, "Challenges and Opportunities For Protecting Geographical Indications In Thailand", *Asia-Pacific Development Journal*, Vol. 19, No. 2, December 2012.
- Clark W. Lackert, "Geographical Indications: What Does the WTO TRIPs Agreement Require?", *Trademark World*, August, 1998.
- D. Lobell, M. Burke (eds.), *Climate Change and Food Security, Advances in Global Change Research*, New York :Springer Science Business Media, 2010.
- Dalila Cervantes-Godoy, Joe Dewbre, "Economic Importance of Agriculture for Sustainable Development and Poverty Reduction: Findings from a Case Study of Indonesia", *Paper for Global Forum on Agriculture, Policies for Agricultural Development, Poverty Reduction and Food Security*, 29-30 November 2010.
- David Satterthwaite, Gordon McGranahan, and Cecilia Tacoli, "Urbanization and its Implications For Food and Farming" *Philos Trans R Soc Lond B Biol Sci.*, Vol. 365, 2010.
- David Vivas Eugui, Christoph Spennemann, 'The Treatment of Geographical Indications in Recent Regional and Bilateral Free Trade Agreement, in Meir Perez Pugatch (eds), *The Intellectual Property Debate, Perspective from Law, Economic and Political Economy* ( Edward Elgar, Cheltenham, UK, 2006.
- Dev Saif Gangjee, "Quibbling Siblings: Conflicts between Trademarks and Geographical Indications", *Chicago-Kent Law Review*, volume 2, 2007.
- Dwijen Rangnekar, "the Socio-Economics of Geographical Indications: A Review of Empirical Evidence From Europe," *Paper*, 2004.
- EC Response to the Checklist of Questions: Review under Art 24.2, IP/C/W/117/Add.10 (Mar. 26, 1999).
- Eleanor K. Meltzer, 'Pass the Parmesan? What You Need to Know about Geographical Indication and Trademarks', *Intellectual Property Feature*, June/July 2002.
- Emilie Vandecandelaere, et.al, *Linking People, Places And Products : a Guide for Promoting Quality Linked to Geographical Origin and Sustainable Geographical Indication*, Rome :FAO, 209, 2010.
- Ernes Oliva, et.al, "Agricultural Produce of Istria Used in Regional Branding : Strategic Concept", *Paper*, 22nd Cromar Congress, Marketing Challenges in New Economy, 2011.
- FAO, "An Introduction to the Basic Concepts of Food Security", *Practical Guidance*, 2008.
- Felix Addor, "Geographical Indications – Where Now After Cancun?", *Paper* presented at OriGIn, 2nd Meeting, Alicante, 27–28 November 2003.
- Food Security for Indonesia Should Be Top Priority, Experts Warn", *Jakarta Globe*, 23 November 2013. <http://jakartaglobe.beritasatu.com/news/food-security-for-indonesia-should-be-top-priority-experts-warn/>
- Ian Scoones, "Agricultural Biotechnology and Food Security: Exploring the Debate," *IDS Working Paper 145*, January 2002.
- Indonesia Cabinet Secretary, "Indonesia's Food Prices are Still High", 27 January 2016, <http://setkab.go.id/en/indonesias-food-prices-are-still-high-president-jokowi/>
- Inside Indonesia, "Food security in Indonesia", <http://www.insideindonesia.org/food-security-in-indonesia-2>
- J.A. Lassa, "Emerging 'Agricultural Involution' in Indonesia: Impact of Natural Hazards and Climate Extremes on Agricultural Crops and Food System", in Y. Sawada, S. Oum (eds.), *Economic and Welfare Impacts of Disasters in East Asia and Policy Responses*, Jakarta: ERIA, 2012.
- J.M. Lenné and D. Wood, *Agrobiodiversity Management for Food Security: a Critical Review*, London: CAB International, 2011.
- Jeremy Philips, *Trademark Law – A Practical Anatomy* (Oxford University Press, 2<sup>nd</sup> ed. 2003.
- JH Jackson, "The Status of Treaties in Domestic Legal System : A Policy Analysis", *AJIL*, Vol. 86, 1992 .
- Jules Pretty, "Overview to Four Volumes: Sustainable Agriculture and Food", in Jules Pretty (ed), *Sustainable Agriculture and Food*, Volume I, London: EarthScan, 2008.
- Laurence Be'ard and Philippe Marchenay, "Local products and geographical indications: taking account of local knowledge and biodiversity", *International Social Science*, No. 187, 2006.
- Louis Lorvellec, "You've Got to Fight for Your Right to Party: A Response to Professor Jim Chen", *Minn. J. Global Trade*, Vol.65, 1996.
- Luan Carlos Santos Silva et al, "Geographical Indications Contributions for Brazilian Agribusiness Development", *African Journal of Agricultural Research*, Vol. 8(18), 2013.
- M.S. Swaminatha, "Ever-Green Revolution and Sustainable Food Security", in Allan Eaglesham, et.al (ed), *Agricultural Biotechnology: Finding Common International Goals*, National Agricultural Biotechnology Council: Minnesota, 2004.
- Mark Davidson, "Geographical Indication", *Paper*, 2007.



Melissa D. Ho, "International Treaty on Plant Genetic Resources For Food and Agriculture", in Marlana A. Diaz (Ed), *Plant Genetic Resources and Food Security*, Nova Science Publishers, Inc : New York, 2010.

Mevhibe Albayrak, Melda Ozdemi, "The Role of Geographical Indication in Brand Making of Turkish Handcrafts", *International Journal of Business and Social Research (IJBSR)*, Volume -2, No.-3, June 2012.

Michael Blakeney, *Intellectual Property and Food Security*, Chambrige:CABI, 2009.

Ministry of State secretariat of the Republic of Indonesia, [http://www.setneg.go.id/index.php?option=com\\_content&task=view&id=10643&Itemid=55](http://www.setneg.go.id/index.php?option=com_content&task=view&id=10643&Itemid=55)

Mohamed Behnassi, Sanni Yaya, "Food Crisis Mitigation: The Need for an Enhanced Global Food Governance", in Mohamed Behnassi, et.al (ed), *Global Food Insecurity Rethinking Agricultural and Rural Development Paradigm and Policy*, London: Springer Science+Business Media B.V., 2011.

Monique Ngo Bagal, Massimo Vittori, "Practical Manual on Geographical Indications for ACP Countries, CTA and origin", Agridea-Switzerland, 2011.

Nicholas Rada, Anita Regmi, "Trade and Food Security Implications From the Indonesian Agricultural Experience," *WRS-10-01 Economic Research Service/USDA*, 2010.

Per Pinstrup-Andersen, "Food Security: Definition and Measurement", *Food Sec.*, 2009.

Per Pinstrup-Andersen, Peter B.. R.. Hazel, "The Impact of the Green Revolution and Prospects for the Future," *Food Reviews International*, Vol 1, No.1, 1985.

Queen Mary Intellectual Property Research Institute, "The Relationship Between Intellectual Property Rights (TRIPS) and Food Security," June, 2004.

Richard Barichello, Arianto Patunru, "Agriculture in Indonesia: Lagging Performance and Difficult Choices", *Choices*, Vol 24 (2), 2nd Quarter, 2009.

S. Maxwell, M. Buchanan-Smith, "Household Food Security: a Conceptual Review", in S. Maxwell and T. Frankenburger (eds), *Household Food Security: Concepts, Indicators, Measurements: a Technical Review*, New York : UNICEF and UNTAD, 1992.

Sanjeev Agarwal, Michael J. Barone, "Emerging Issues for Geographical Indication Branding Strategies", *MATRIC Research Paper05-MRP 9*, Januari 2005.

Stephen Stern, 'Geographical Indications And Trade Marks: Conflicts And Possible Resolutions', *Paper At WIPO Symposium On Geographical Indications*, San Francisco, California, July 9 To 11, 2004.

Subejo, Dwiningtyas Padmaningrum, "Tackling Food Security Problem in Indonesia", *Jakarta Pos*, November 26, 2013.

Surip Mawardi, "Advantages, constraints and key success factors in establishing origin- and tradition-linked quality signs: the case of Kintamani Bali Arabica coffee geographical indication, Indonesia," *Paper for case study of Case study on quality products linked to geographical origin in Asia carried out for FAO*, 25 May 2009.

Surip Mawardi, "Establishment of Geographical Indication Protection System in Indonesia, Case in Coffee," *Paper of WIPO/GEO/SOF/09/3*, Worldwide Symposium On Geographical Indications jointly organized by the World Intellectual Property Organization (WIPO) and the Patent Office of the Republic of Bulgaria, Sofia, June 10 to 12, 2009.

Surip Mawardi, "Establishment of Geographical Indication Protection System In Indonesia: Case In Coffee", *Paper WIPO/GEO/SOF/09/3*, Worldwide Symposium on Geographical Indications jointly organized by WIPO and the Patent Office of the Republic of Bulgaria, 2009.

Surip Mawardi, et al, "Developing Geographical Indication Protection in Indonesia: Bali Kintamani Arabica Coffee as a Preliminary Case", Paper presented in Seminar on Geographical Indication: A Land of Opportunities", Hanoi (Vietnam), 15 – 16 November 2005.

William McLeod Rivera, M. Kalim Qamar, *Agricultural Extension, Rural Development and The Food Security Challenge*, Rome: FAO, 2003.

WIPO, "Geographical Indication : an Introduction", *WIPO Publication 952*, 2013.

WIPO, *Summary of Replies to the Questionnaire on Trademark Law and Practice*, at 80, WIPO Doc. SCT/14/5 Rev. (Nov. 1, 2005).

WIPO, "Geographical Indication", [http://www.wipo.int/geo\\_indications/en/](http://www.wipo.int/geo_indications/en/), viewed on 2 January 2016.

World Bank, "Priority Issues for Indonesian Agriculture", <http://www.worldbank.or.id> - January 2005.

Yasmon Rangkyo Sati, *Laws on the Republic of Indonesia on Intellectual Property Right*, ShortCUT Gagas Imaji : Jakarta, Indonesia, 2003.